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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,185	03/14/2002	Randall L. Barbour	0887-4170	8875

7590

08/15/2006

Morgan & Finnegan  
345 Park Avenue  
New York, NY 10154

EXAMINER

STAFIRA, MICHAEL PATRICK

ART UNIT	PAPER NUMBER
2877	

DATE MAILED: 08/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Supplemental  
Notice of Allowability**

Application No.

10/088,185

Examiner

Michael P. Stafira

Applicant(s)

BARBOUR ET AL.

Art Unit

2877

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE filed 6/29/2006.
2. ☒ The allowed claim(s) is/are 1-3 and 6-23.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

## **DETAILED ACTION**

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

- a. On Page 2 of the specification on lines 7-8, delete "copending application serial number "not yet assigned," attorney docket number 0887-4147PC1, fled on the same day as this application" and insert --U.S. Patent No. 6,795,195--;
- b. On Page 2 of the specification on line 11 delete "4147PC1 application" and insert --'195 patent--;
- c. On Page 2 of the specification on lines 11-12, delete "copending application serial number "not yet assigned," attorney docket number 0887-4149PC1, fled on the same day as this application" and insert --U.S. Patent No. 6,937,884--;
- d. On Page 2 of the specification on line 15 delete "4149PC1 application" and insert --'884 patent--;
- e. In claim 16 after "compressibility" insert ---.

***Allowable Subject Matter***

1. Claims 1-3, 6-23 are allowed over the prior art of record.
2. The following is an examiner's statement of reasons for allowance:

Regarding claim 1, the prior art fails to disclose or make obvious a method for collecting data for use in image reconstruction of a scattering target medium having the steps of selecting at least one wavelength of near infrared energy, wherein the at least one wavelength of near infrared energy is selected to maximize the total path length of near infrared energy propagating through the target medium from the source to a detector and to maintain an acceptable energy density at the detector; selecting a single wavelength to maximize the total path length of near infrared energy from the source to a detector furthest from the source and to maintain an acceptable energy density at the farthest detector, and in combination with the other recited limitations of claim 1. Claims 2-3, 6-17 are allowed by the virtue of dependency on the allowed claim 1.

Regarding claim 18, the prior art fails to disclose or make obvious a method of selecting an optimal wavelength or near infrared energy for imaging in a scattering target medium having the steps of selecting a single wavelength to maximize the total path length of near infrared energy from the source to a detector furthest from the source and to maintain an acceptable energy density at the farthest detector, and in combination with the other recited limitations of claim 18. Claims 19-20 are allowed by the virtue of dependency on the allowed claim 18.

Regarding claim 21, the prior art fails to disclose or make obvious a method for collecting data for use in image reconstruction of a scattering target medium having the steps of providing a source for directing at least one wavelength of near infrared energy into a target

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medium wherein the at least one wavelength is selected to maximize the total path length of near infrared energy propagating through the target medium from the source to a detector and to maintain an acceptable energy density at the detector; selecting a single wavelength to maximize the total path length of near infrared energy from the source to a detector furthest from the source and to maintain an acceptable energy density at the farthest detector, and in combination with the other recited limitations of claim 21.

Regarding claim 22, the prior art fails to disclose or make obvious a system for enhanced imaging of a scattering target medium having a means for selecting at least one wavelength of near infrared energy, wherein the at least one wavelength of near infrared energy is selected to maximize the total path length of near infrared energy propagating through the target medium from the source to a detector and to maintain an acceptable energy density at the detector; selecting a single wavelength to maximize the total path length of near infrared energy from the source to a detector furthest from the source and to maintain an acceptable energy density at the farthest detector, and in combination with the other recited limitations of claim 22.

Regarding claim 23, the prior art fails to disclose or make obvious a system for enhanced imaging of a scattering target medium having a means for selecting a single wavelength to maximize the total path length of near infrared energy from the source to a detector furthest from the source and to maintain an acceptable energy density at the farthest detector, and in combination with the other recited limitations of claim 23.


Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Stafira whose telephone number is 571-272-2430. The examiner can normally be reached on 4/10 Schedule Mon.-Thurs..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Toatley can be reached on 571-272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Michael P. Stafira  
Primary Examiner  
Art Unit 2877

August 4, 2006